SUN METALS

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634

SUNDOR 5000
SLIDING GLASS DOOR

"LARGE MISSILE IMPACT"

GENERAL NOTES:

1. This product has been evaluated and is in compliance with the 8th Edition (2023) Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).

2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall dressing or stucco.

3. When used in areas requiring wind borne debris protection this product complies with Section 1626.1.2 of the FBC and does not require an impact resistant covering. This product meets missile level "D" and includes Wind Zone 4 as defined in ASTM E 1996 and Section 1609.1.2.2 of the FBC.

4. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

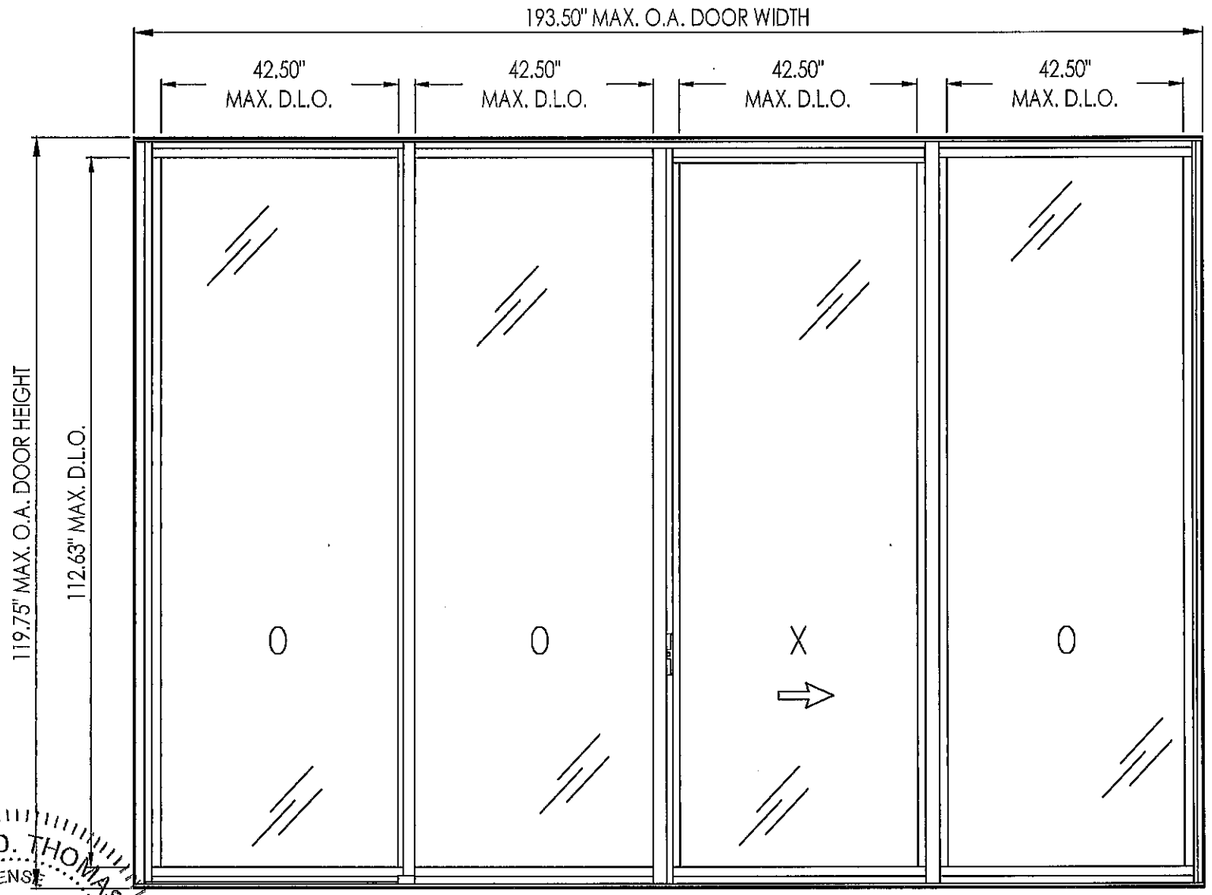


TABLE OF CONTENTS	
SHEET #	DESCRIPTION
1	TYPICAL ELEVATIONS, DESIGN PRESSURES & GENERAL NOTES
2	DOOR PANEL SECTIONS
3	DOOR PANEL SECTIONS
4	SIDELITE PANEL SECTIONS
5	CORNER DETAILS
6	HORIZONTAL CROSS SECTIONS
7	HORIZONTAL CROSS SECTIONS
8	VERTICAL CROSS SECTIONS
9	ANCHORING - CONCRETE SUBSTRATE
10	ANCHORING - STEEL SUBSTRATE
11	COMPONENTS
12	BILL OF MATERIALS & COMPONENTS

GORDON D. THOMAS LICENSE No. 46718 STATE OF FLORIDA PROFESSIONAL ENGINEER

8/11/25
FL46718

O.A. FRAME DIMENSION	D.L.O. DIMENSION	REINFOCED	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
193.50" x 119.75"	42.50" x 112.63"	YES	G3, G4	100.0	100.0
			G1, G2	70.0	75.0
193.50" x 119.75"	42.50" x 112.63"	NO	G1, G2 G3, G4	70.0	75.0

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

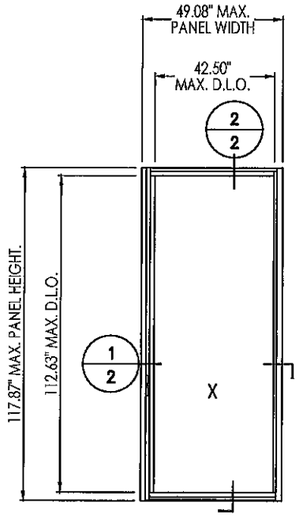
PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES

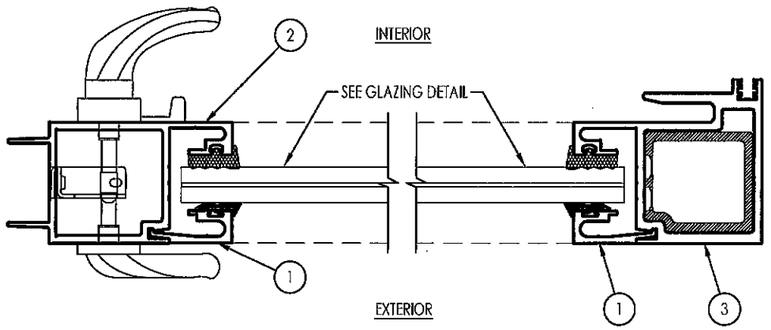
NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

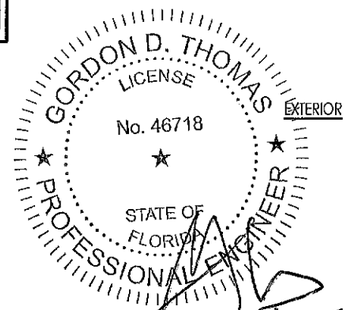
DATE: 08/09/19
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.10
SHEET: 1 OF 12

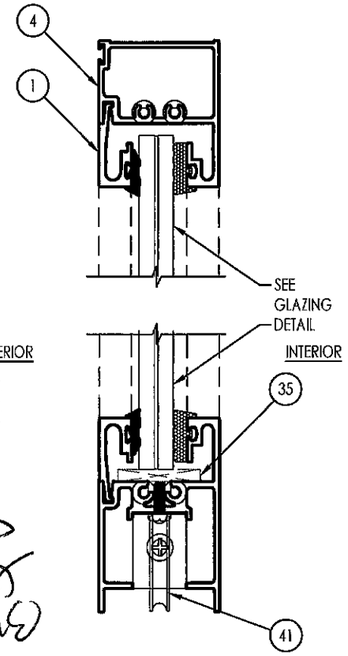


OPERABLE PANEL

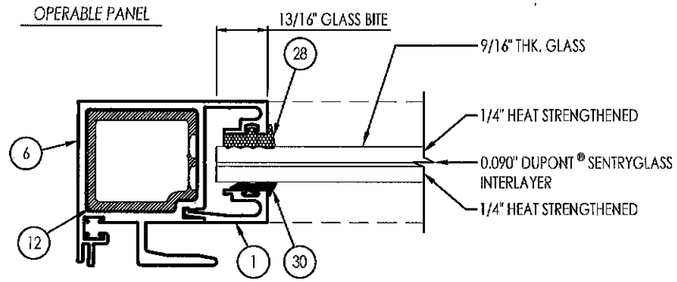


1/2 HORIZONTAL CROSS SECTION

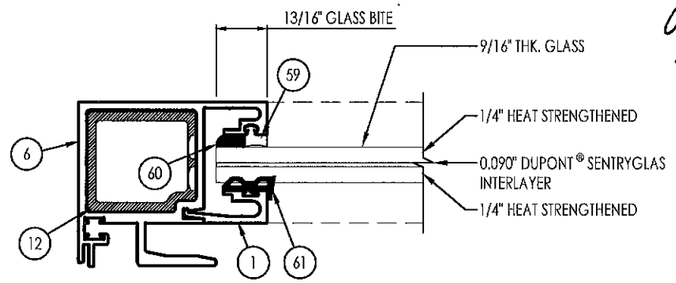




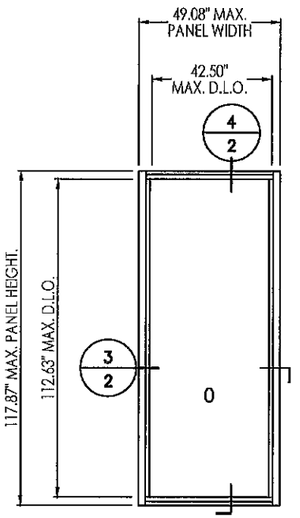
2/2 VERTICAL CROSS SECTION



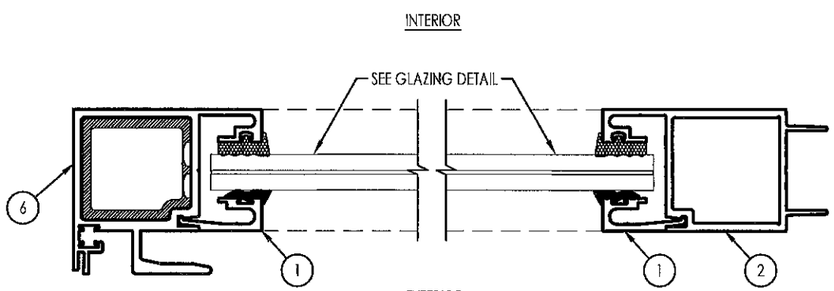
G2 GLAZING DETAIL (DRY GLAZED)
MONOLITHIC
9/16" LAMINATED GLASS



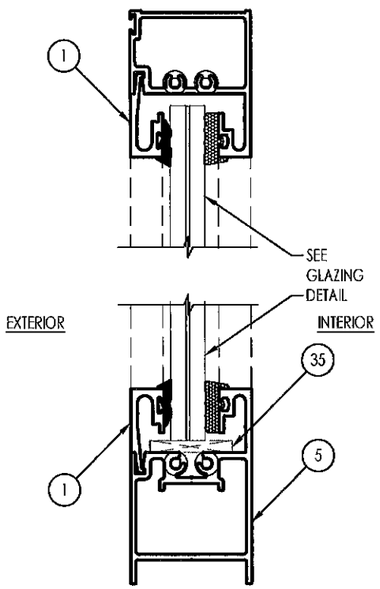
G3 GLAZING DETAIL (WET GLAZED)
MONOLITHIC
9/16" LAMINATED GLASS



FIXED PANEL



3/2 HORIZONTAL CROSS SECTION



4/2 VERTICAL CROSS SECTION

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: DOOR PANEL DETAILS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 08/09/19

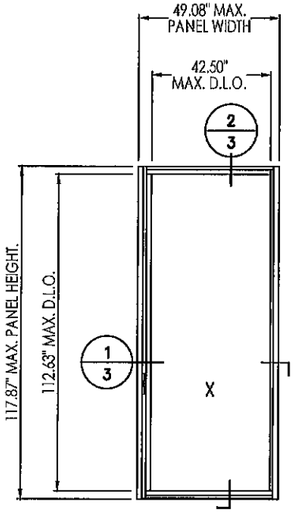
SCALE: NTS

DWG. BY: CO

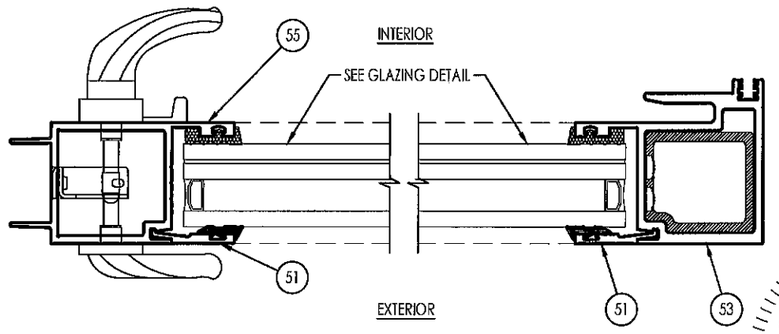
CHK BY: ECV

DRAWING NO.: FL-15903.10

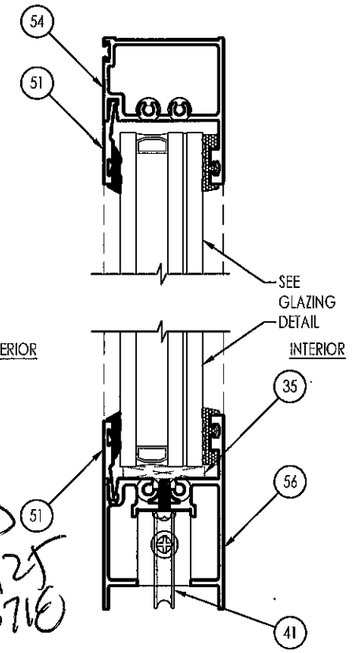
SHEET: 2 OF 12



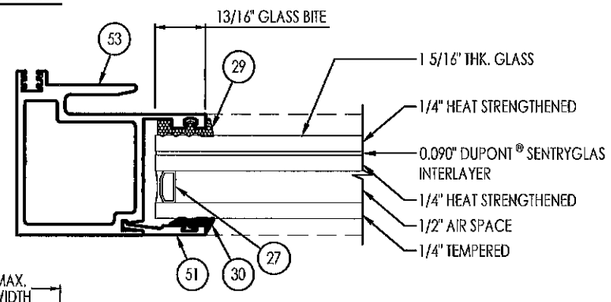
OPERABLE PANEL



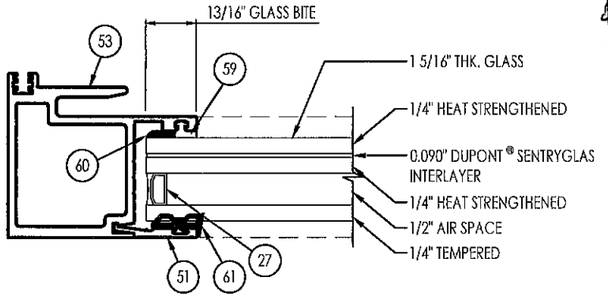
1/3 HORIZONTAL CROSS SECTION



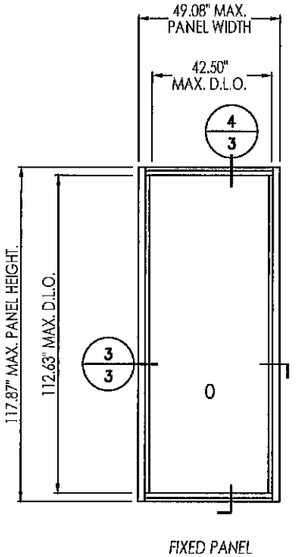
2/3 VERTICAL CROSS SECTION



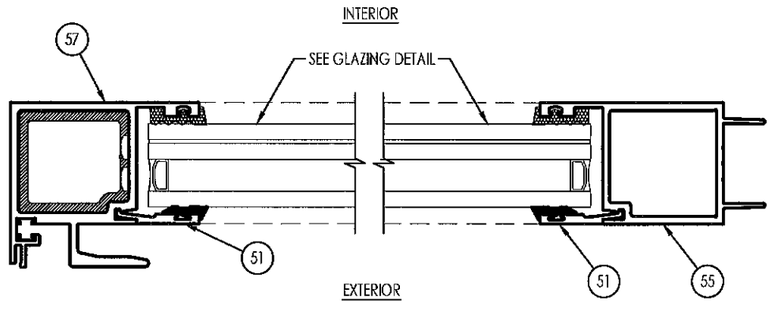
G1 GLAZING DETAIL (DRY GLAZED)
1 5/16" LAMINATED LG. GLASS



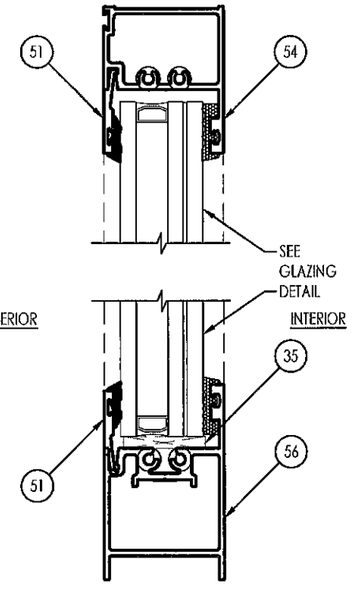
G4 GLAZING DETAIL (WET GLAZED)
1 5/16" LAMINATED LG. GLASS



FIXED PANEL



3/3 HORIZONTAL CROSS SECTION



4/3 VERTICAL CROSS SECTION

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF
FLORIDA
PROFESSIONAL ENGINEER

9/4/25
FL 46718

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: DOOR PANEL DETAILS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 08/09/19

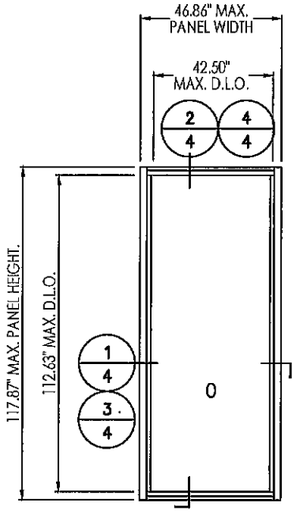
SCALE: NA

DWG. BY: CO

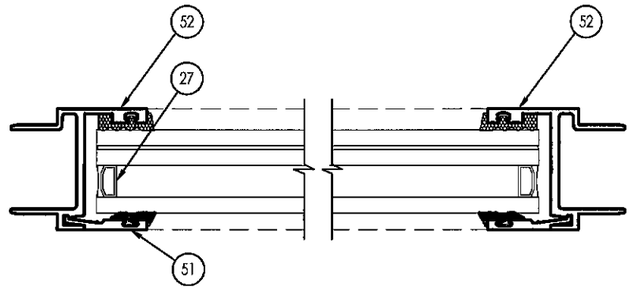
CHK BY: ECV

DRAWING NO.: FL-15903.10

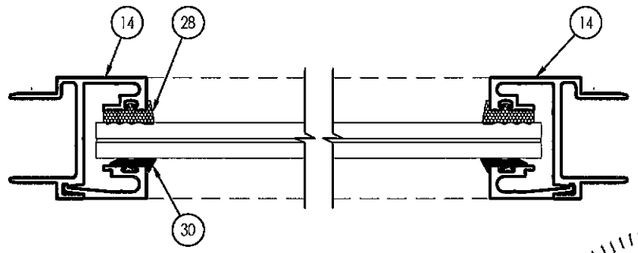
SHEET: 3 OF 12



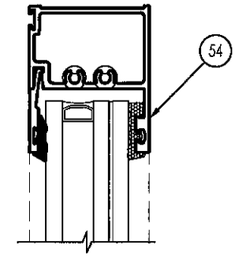
SIDELITE PANEL

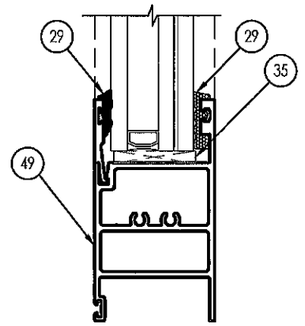


1/4 HORIZONTAL CROSS SECTION

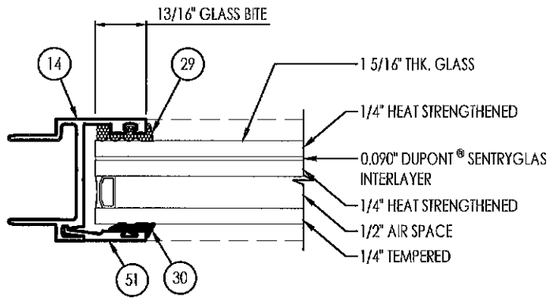


3/4 HORIZONTAL CROSS SECTION

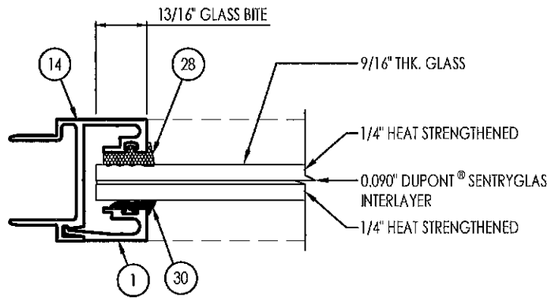




2/4 VERTICAL CROSS SECTION



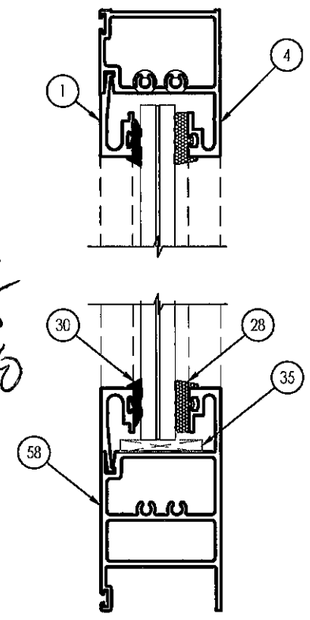
G1 GLAZING DETAIL
1 5/16" LAMINATED I.G. GLASS



G2 GLAZING DETAIL
MONOLITHIC
9/16" LAMINATED GLASS

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER

FL 46718



4/4 VERTICAL CROSS SECTION

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: SIDELITE PANEL DETAILS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 08/09/19

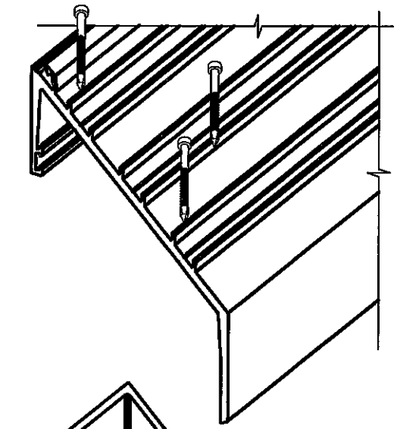
SCALE: NTS

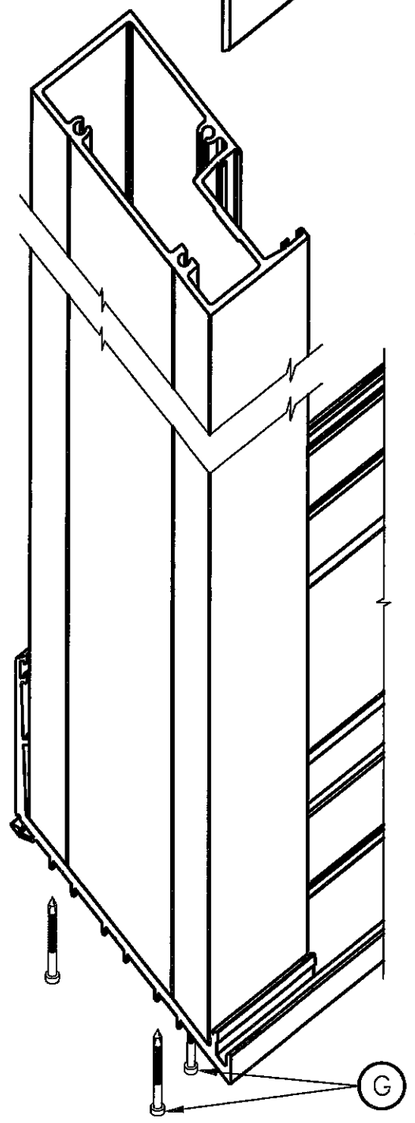
DWG. BY: CO

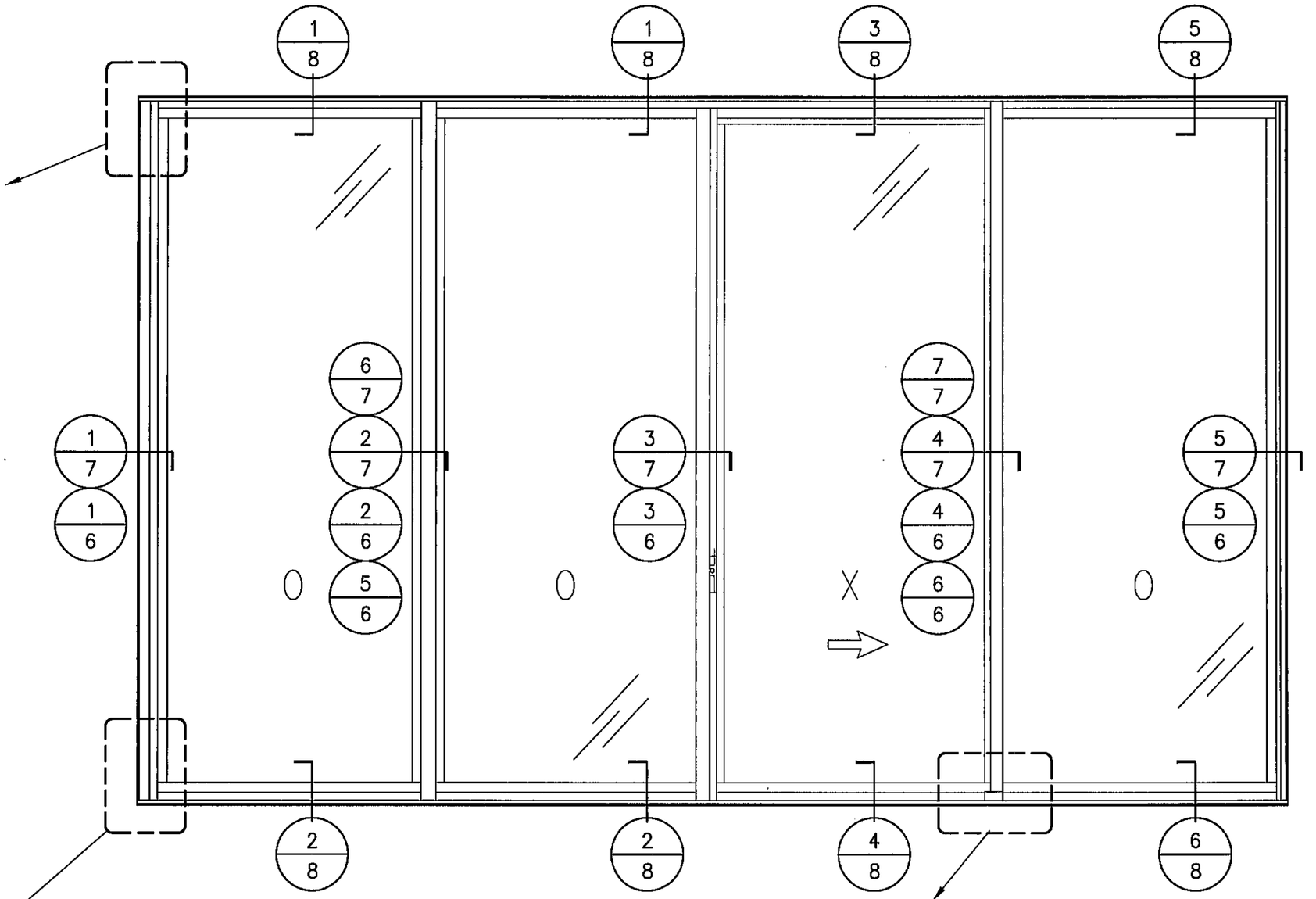
CHK BY: ECV

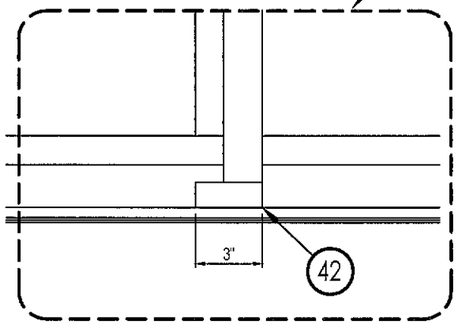
DRAWING NO.: FL-15903.10

SHEET: 4 OF 12









GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER

8/11/25
FL 46718

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: CORNER DETAILS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 08/09/19

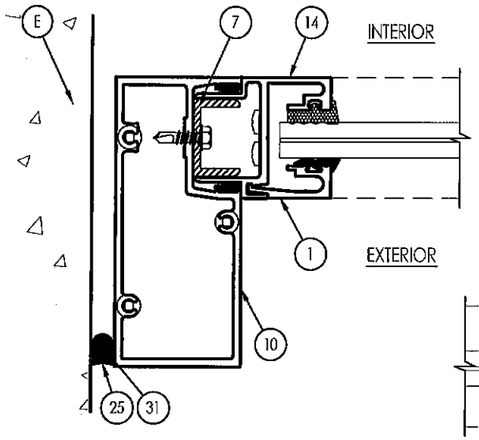
SCALE: NTS

DWG. BY: CO

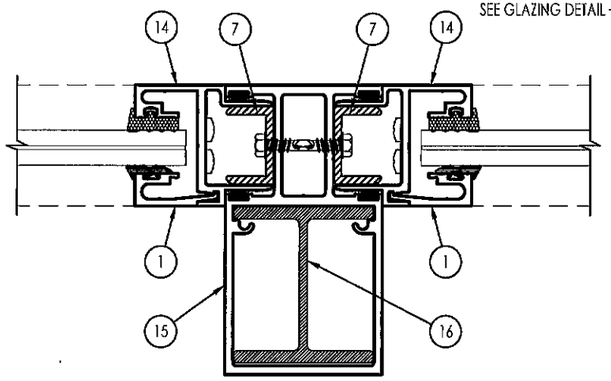
CHK BY: ECV

DRAWING NO.: FL-15903.10

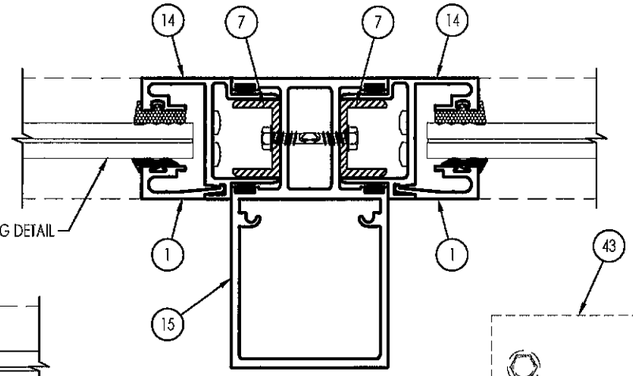
SHEET: 5 OF 12



1/6 HORIZONTAL CROSS SECTION

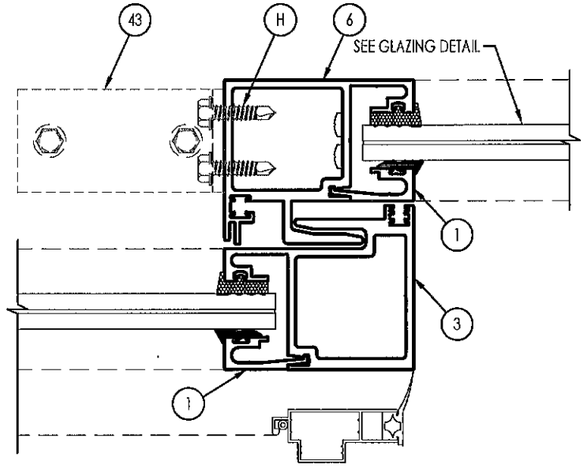


2/6 HORIZONTAL CROSS SECTION
With Reinforcement

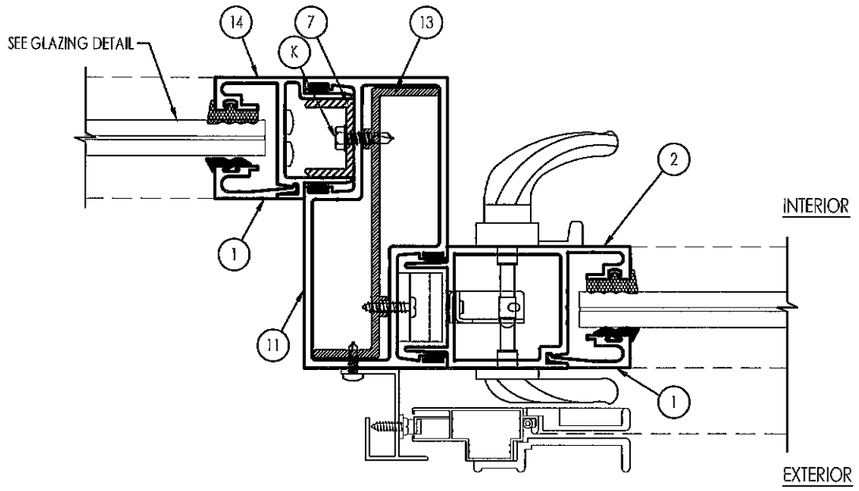


5/6 HORIZONTAL CROSS SECTION
Without Reinforcement

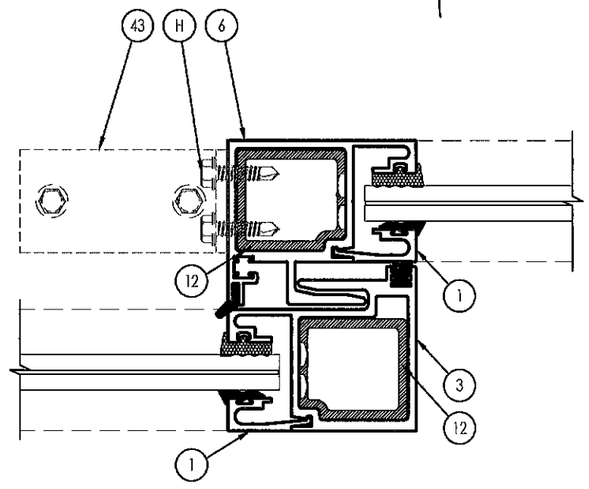
GORDON D. THOMAS
LICENSE
No. 46718
STATE OF
FLORIDA
PROFESSIONAL ENGINEER



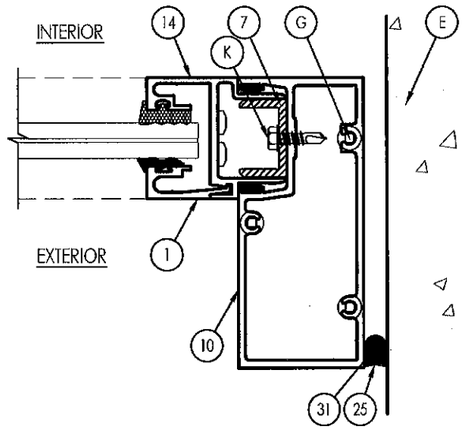
6/6 HORIZONTAL CROSS SECTION
Without Reinforcement



3/6 HORIZONTAL CROSS SECTION
The OXO Adaptor always requires
the OXO Adaptor reinforcement



4/6 HORIZONTAL CROSS SECTION
With Reinforcement



5/6 HORIZONTAL CROSS SECTION

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023)	FBC
3	9/21/20	UPDATE TO 7TH ED. (2020)	FBC
2	8/9/19	UPDATE TO 6TH ED. (2017)	FBC
1	2/18/15	UPDATE TO 5TH ED. (2014)	FBC
		REVISIONS	

JOB	ECV
ECV	LFS

DATE: 08/09/19

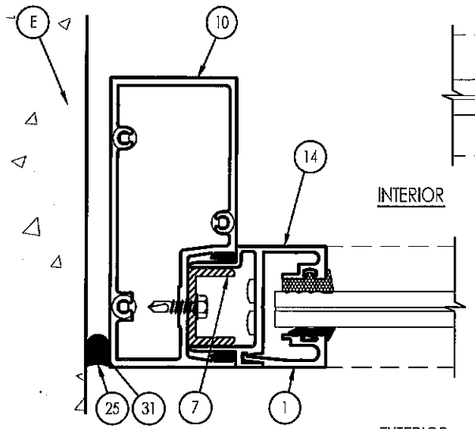
SCALE: NTS

DWG. BY: CO

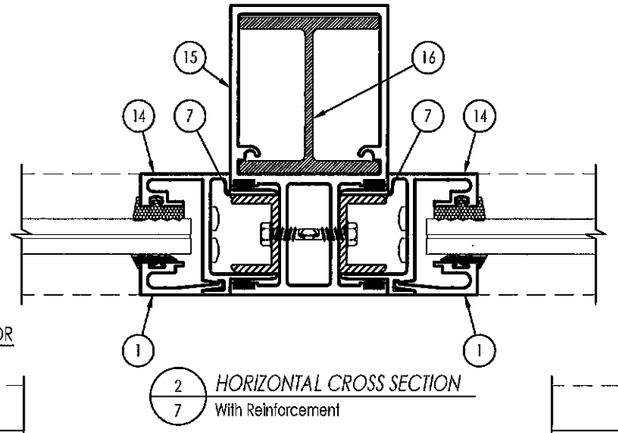
CHK BY: ECV

DRAWING NO.: FL-15903.10

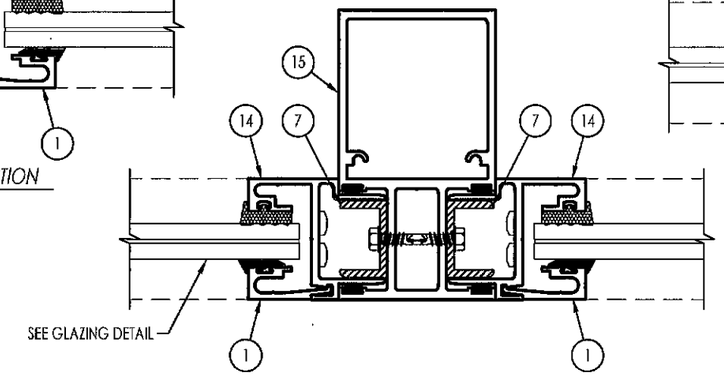
SHEET: 6 OF 12



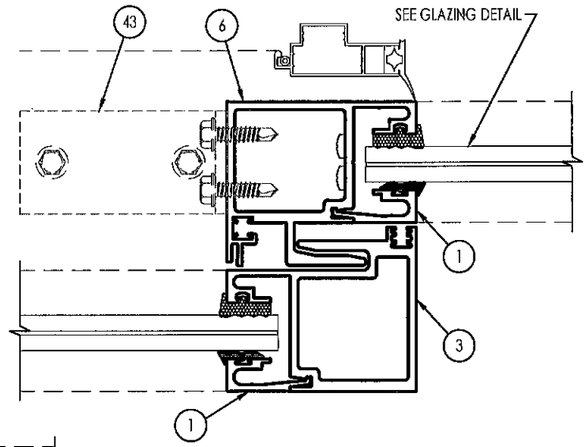
1/7 HORIZONTAL CROSS SECTION



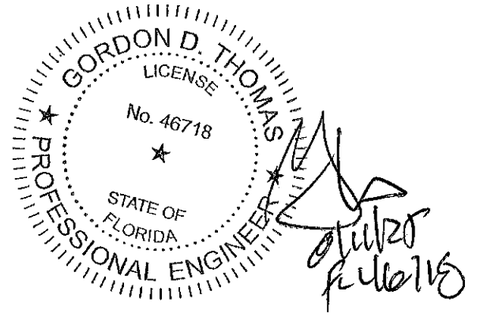
2/7 HORIZONTAL CROSS SECTION
With Reinforcement

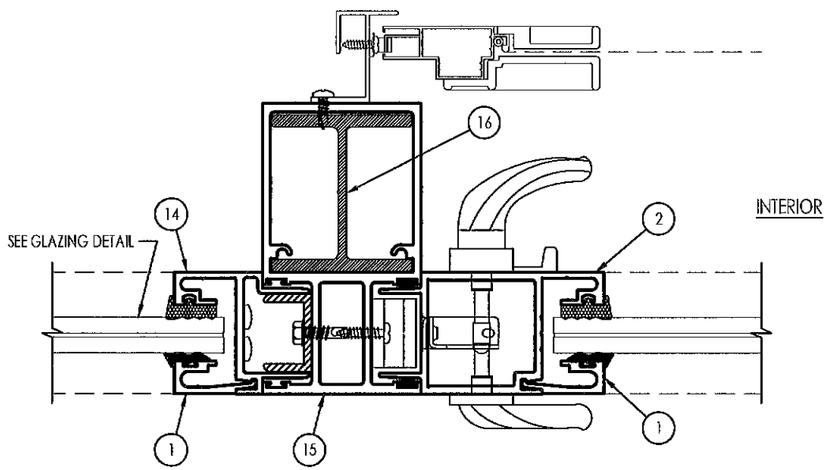


6/7 HORIZONTAL CROSS SECTION
Without Reinforcement

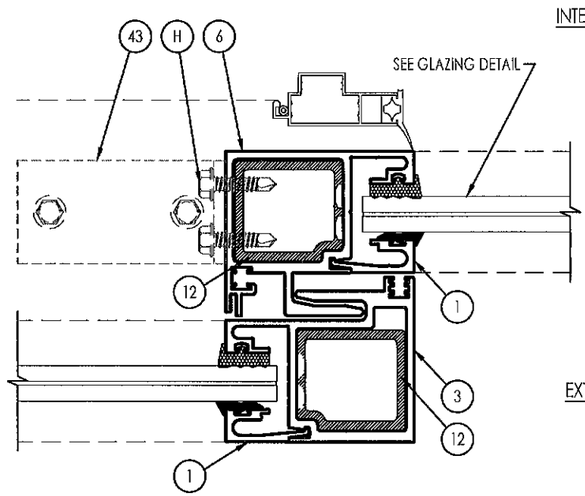


7/7 HORIZONTAL CROSS SECTION
Without Reinforcement

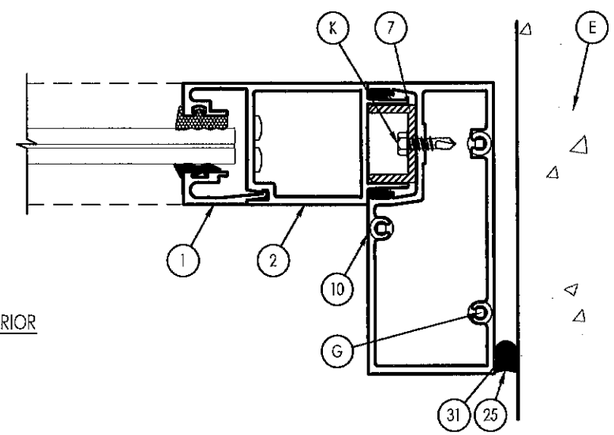




3/7 HORIZONTAL CROSS SECTION
With Reinforcement



4/7 HORIZONTAL CROSS SECTION
With Reinforcement



5/7 HORIZONTAL CROSS SECTION

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023)	FBC
3	9/21/20	UPDATE TO 7TH ED. (2020)	FBC
2	8/9/19	UPDATE TO 6TH ED. (2017)	FBC
1	2/18/15	UPDATE TO 5TH ED. (2014)	FBC
		REVISIONS	

DATE: 08/09/19

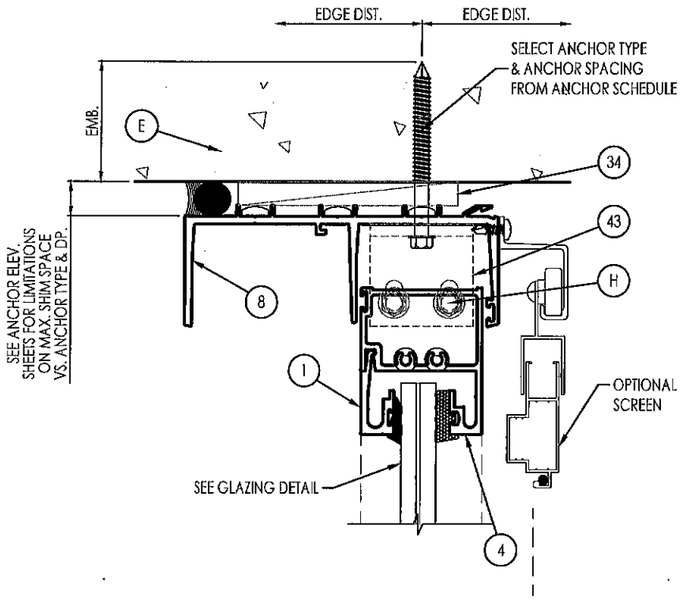
SCALE: NTS

DWG. BY: CO

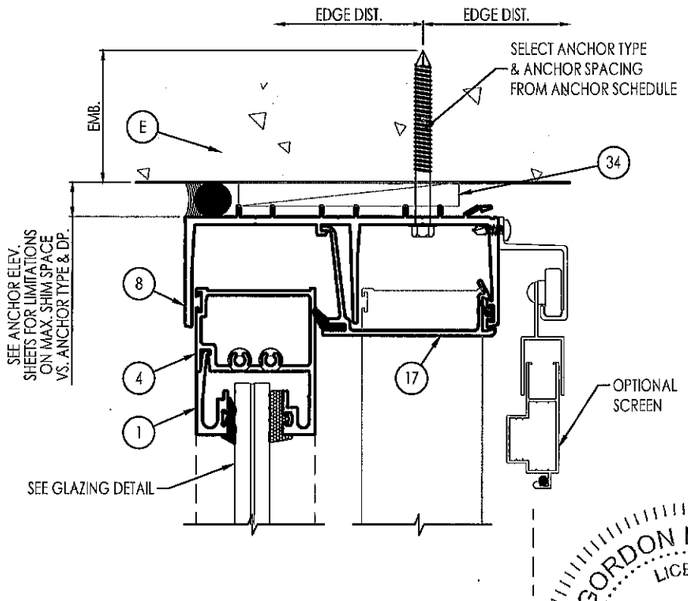
CHK BY: ECV

DRAWING NO.: FL-15903.10

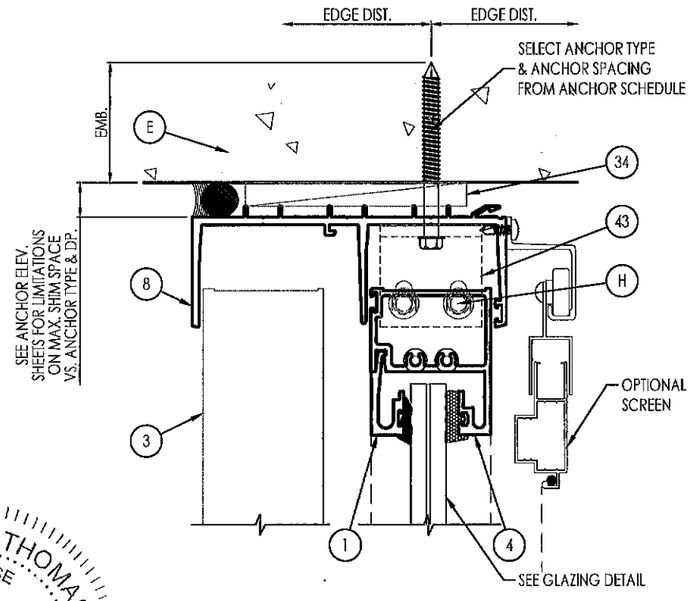
SHEET: 7 OF 12



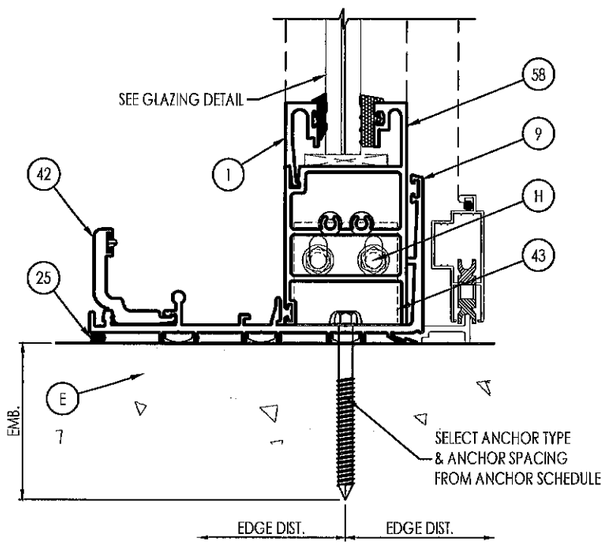
1/8 VERTICAL CROSS SECTION



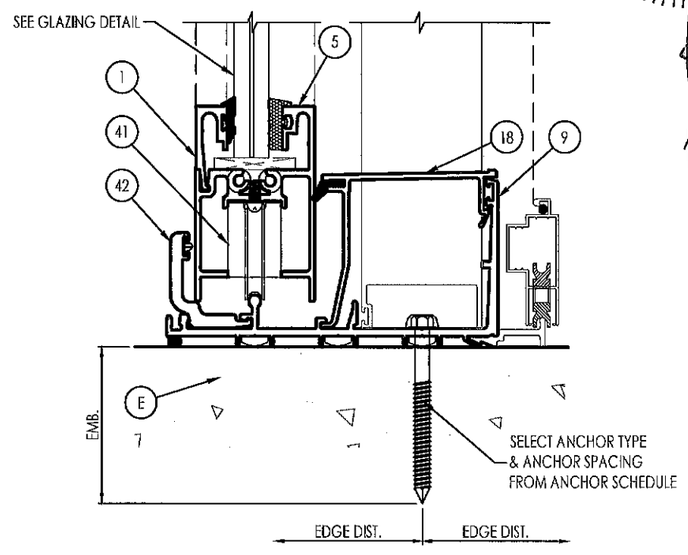
3/8 VERTICAL CROSS SECTION



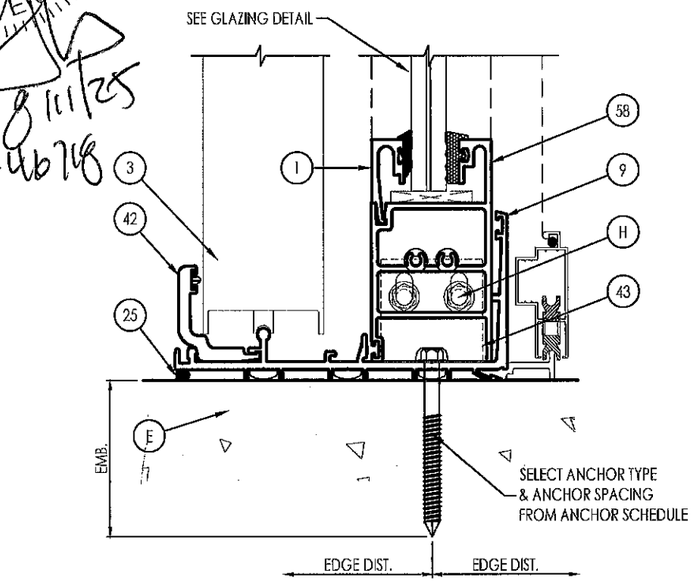
5/8 VERTICAL CROSS SECTION



2/8 VERTICAL CROSS SECTION



4/8 VERTICAL CROSS SECTION



6/8 VERTICAL CROSS SECTION

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER

9/11/25
FL 46718

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: VERTICAL CROSS SECTIONS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

DATE: 08/09/19

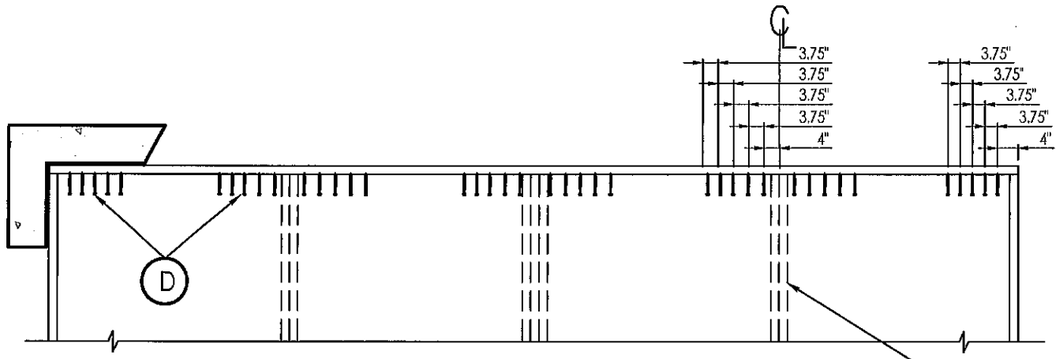
SCALE: NTS

DWG. BY: CO

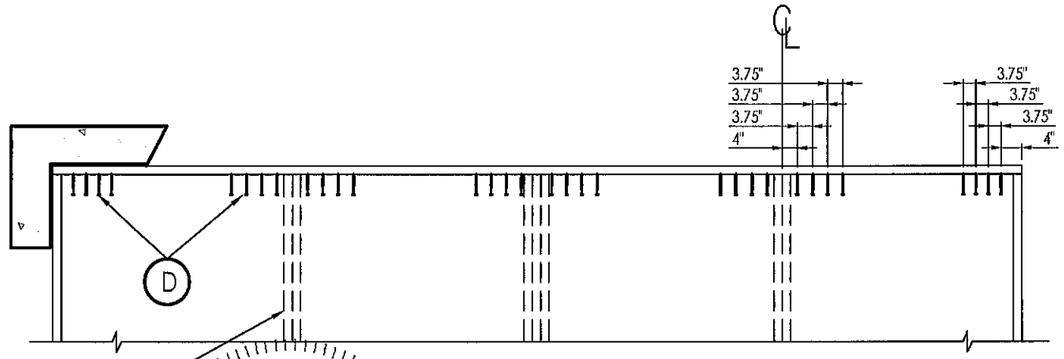
CHK BY: ECV

DRAWING NO.: FL-15903.10

SHEET: 8 OF 12



FRAME ANCHORING @ HEAD
DP <= 70 PSF
Max. shim space <= .625

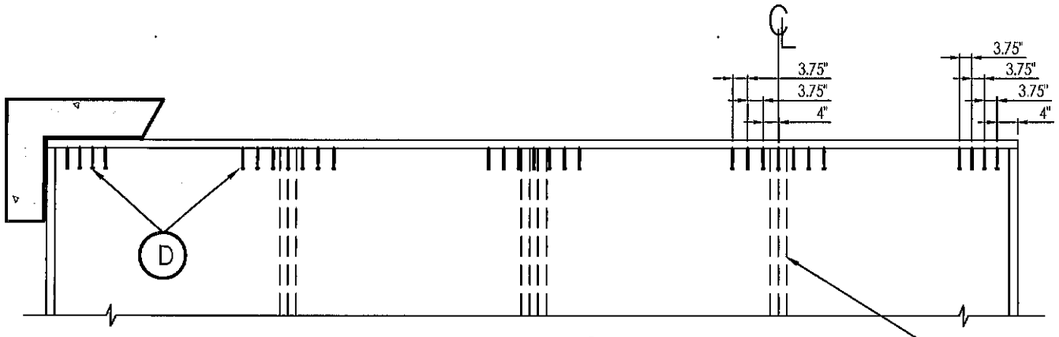


FRAME ANCHORING @ HEAD
DP <= 100 PSF
Max. shim space <= .25

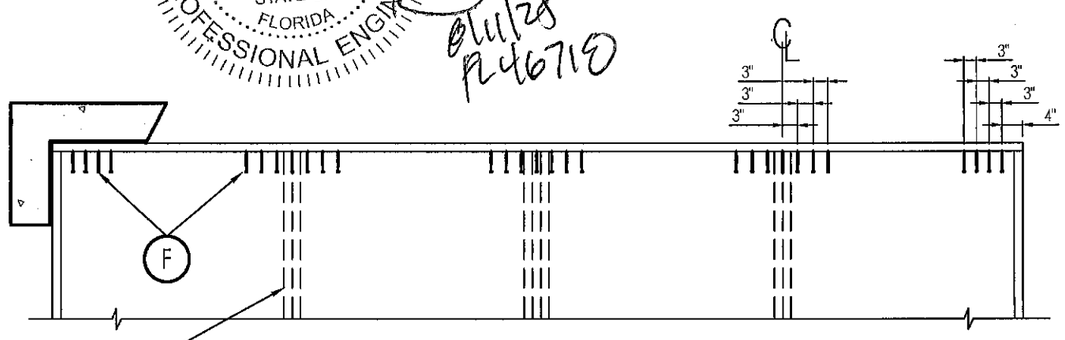
MEETING STILES SHOWING FOR LOCATION REFERENCE ONLY

GORDON D. THOMAS LICENSE No. 46718 STATE OF FLORIDA PROFESSIONAL ENGINEER

8/11/25 FL46718



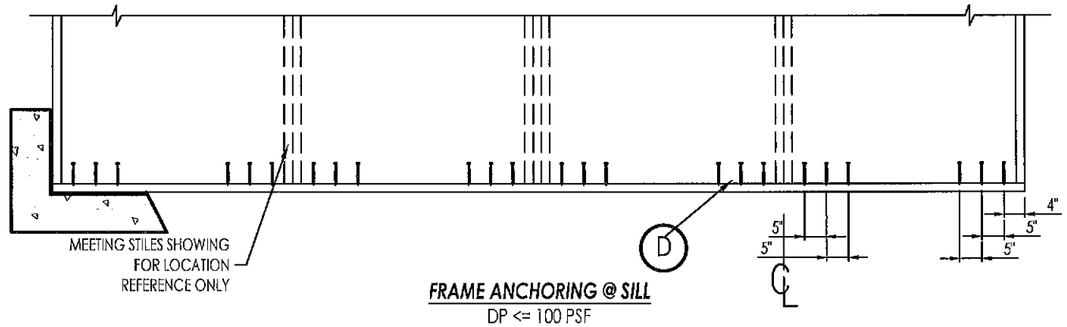
FRAME ANCHORING @ HEAD
DP <= 68 PSF
Max. shim space <= .41



FRAME ANCHORING @ HEAD
DP <= 100 PSF
Max. shim space <= .625

MEETING STILES SHOWING FOR LOCATION REFERENCE ONLY

SUBSTRATE		ANCHOR SCHEDULE
CONCRETE	(D)	5/16" Ø HWH ITW Tapcon® XL concrete anchor with 1-3/4" min. embedment, 2-3/16" minimum edge distance and 3-3/4" minimum clearance to adjacent concrete anchors. Concrete is 3,000 PSI minimum conforming to ACI 301.
	(F)	3/8" Ø ITW Dynabolt Sleeve Anchor with 1-1/2" min. embedment, 2-1/2" minimum edge distance and 3" minimum clearance to adjacent concrete anchors. Concrete is 3,000 PSI minimum conforming to ACI 301.



FRAME ANCHORING @ SILL
DP <= 100 PSF
Max. shim space <= .17

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

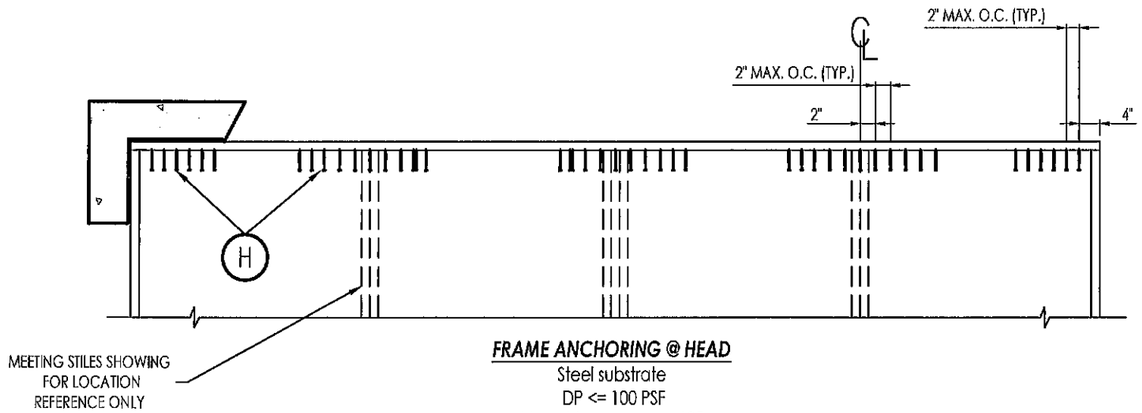
PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: ANCHORING CONCRETE SUBSTRATE

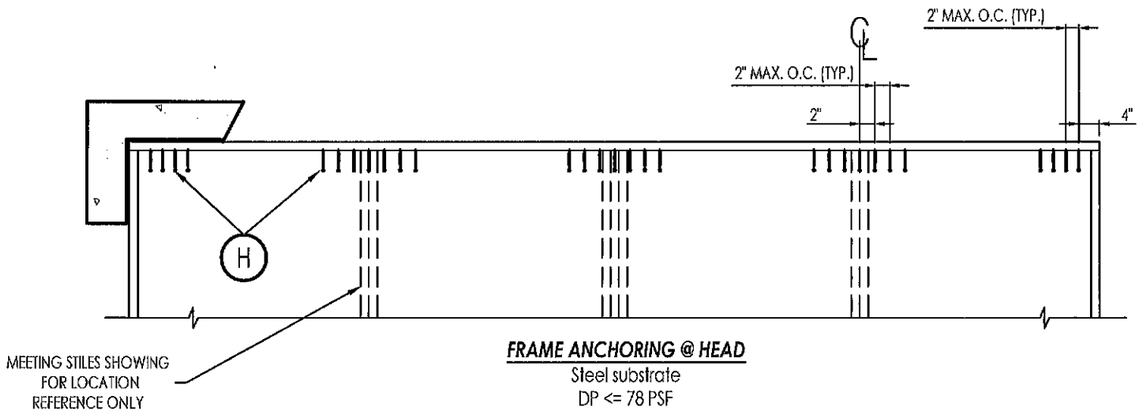
NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023)	FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020)	FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017)	FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014)	FBC	LFS

REVISIONS

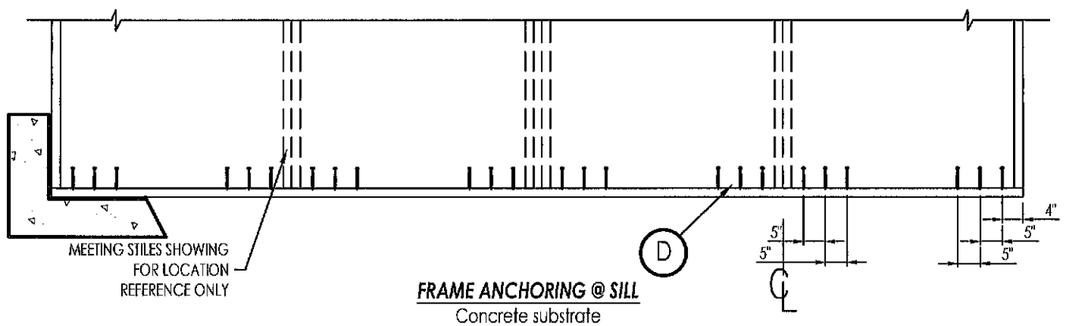
DATE: 08/09/19
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.10
SHEET: 9 OF 12



FRAME ANCHORING @ HEAD
Steel substrate
DP <= 100 PSF
Max. shim space <= .625



FRAME ANCHORING @ HEAD
Steel substrate
DP <= 78 PSF
Max. shim space <= .625



FRAME ANCHORING @ SILL
Concrete substrate
DP <= 100 PSF
Max. shim space <= .17

SUBSTRATE		ANCHOR SCHEDULE
CONCRETE	(D)	5/16" Ø HWH ITW Tapcon® XL concrete anchor with 1-3/4" min. embedment, 2-3/16" minimum edge distance and 3-3/4" minimum clearance to adjacent concrete anchors. Concrete is 3,000 PSI minimum conforming to ACI 301.
STEEL	(H)	1/4-20 HWH Hilti KWIK-FLEX® self drilling screws. Steel with 0.125" minimum wall thickness conforming to ASTM A500 Grade B, Fy=46,999 PSI & Fu=58,000 PSI or ASTM A653, Fy=33,000 PSI, Fu= 45,000 PSI. Minimum embedment of 3 threads through steel substrate, with 1" min. edge distance and 1" min. CL to CL spacing.

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER

8/11/25
FL46716

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

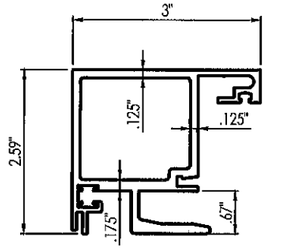
SUN METALS

PRODUCT: SLIDING GLASS DOOR

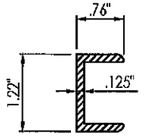
PART OR ASSEMBLY: ANCHORING STEEL SUBSTRATE

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023)	FBC
3	9/21/20	UPDATE TO 7TH ED. (2020)	FBC
2	8/9/19	UPDATE TO 6TH ED. (2017)	FBC
1	2/18/15	UPDATE TO 5TH ED. (2014)	FBC
		REVISIONS	

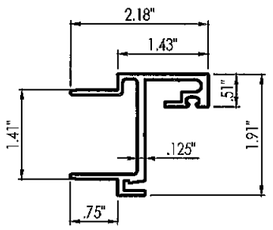
DATE: 08/09/19
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.10
SHEET: 10 OF 12



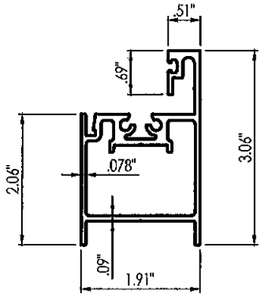
6 INTERLOCK STILE - FIXED PANEL
9/16" GLASS



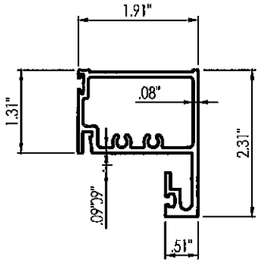
7 FIXED PANEL RETAINING CLIP



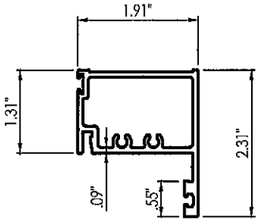
14 FIXED PANEL STILE
9/16" GLASS



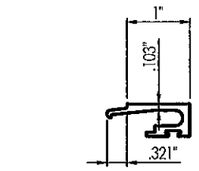
5 BOTTOM RAIL - MOVING PANEL
9/16" GLASS



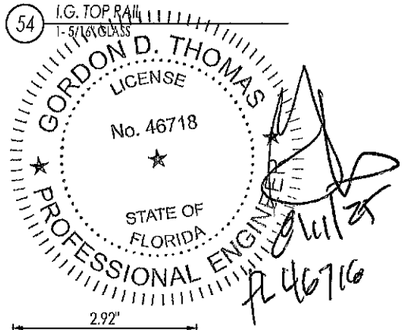
4 TOP RAIL
9/16" GLASS

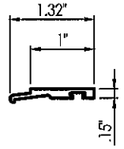


54 I.G. TOP RAIL
1- 5/16" GLASS



1 GLAZING BEAD
9/16" GLASS





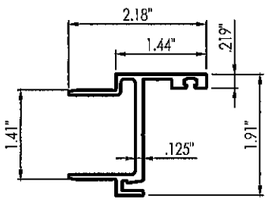
51 I.G. GLAZING BEAD
1- 5/16" GLASS

30 WEDGE

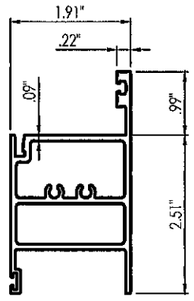
28 PRE-SET GASKET

61 WEDGE

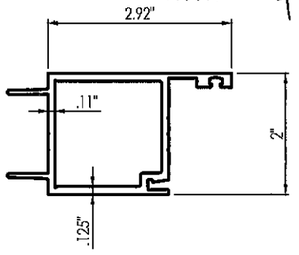
59 FOAM CAULK STOP



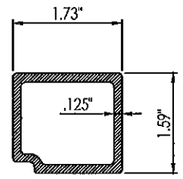
52 I.G. FIXED PANEL STILE
1- 5/16" GLASS



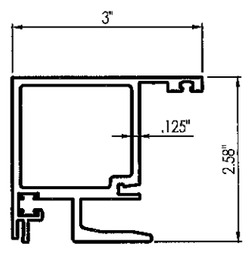
49 I.G. BOTTOM RAIL - FIXED PANEL
1- 5/16" GLASS



55 I.G. LEAD STILE
1- 5/16" GLASS

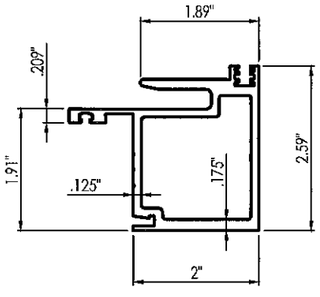


12 REINFORCEMENT

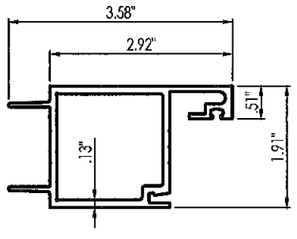


57 I.G. INTERLOCK STILE - FIXED PANEL
1-5/16" GLASS

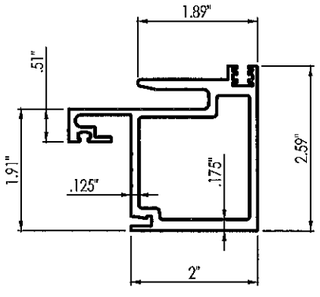
29 PRE-SET GASKET



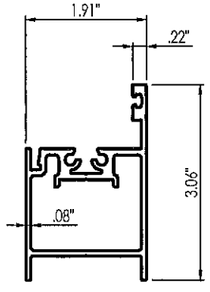
53 I.G. INTERLOCK STILE - MOVING PANEL
1-5/16" GLASS



2 LEAD STILE
9/16" GLASS



3 INTERLOCK STILE - MOVING PANEL
9/16" GLASS



56 I.G. BOTTOM RAIL - MOVING PANEL
1-5/16" GLASS

SUN METALS
5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: COMPONENTS

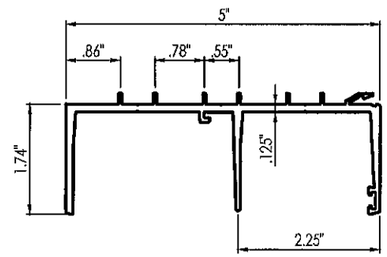
NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023) FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020) FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017) FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014) FBC	LFS

REVISIONS

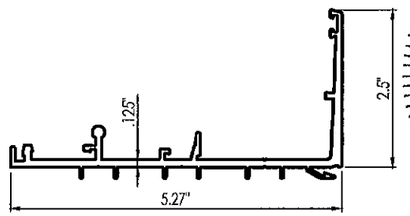
DATE: 08/09/19
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.10
SHEET: 11 OF 12

BILL OF MATERIALS

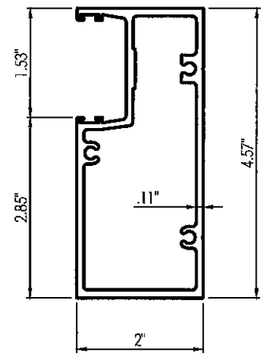
ITEM #	DESCRIPTION	MATERIAL
D	5/16" x 2-3/4" HWH ITW TAPCON XL CONCRETE ANCHOR	STEEL
E	MASONRY - 3,000 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE
F	3/8" x 2-1/2" ITW DYNABOLT SLEEVE ANCHOR	STEEL
G	#10 x 1-1/2" SQ-PH ASSEMBLY SCREW	STL. STEEL
H	1/4-20 HWH HILTI KWIK-FLEX SELF DRILLING SCREW	STEEL
K	#10 x 3/4" HH SELF TAP SCREW	STL. STEEL
1	GLAZING BEAD 6063-T6 (9/16")	ALUM
2	LEAD STILE 6063-T6 (9/16")	ALUM
3	INTERLOCK STILE - MOVING PANEL 6005-T5 (9/16")	ALUM
4	TOP RAIL 6063-T6 (9/16")	ALUM
5	BOTTOM RAIL - MOVING PANEL 6063-T6 (9/16")	ALUM
6	INTERLOCK STILE - FIXED PANEL 6005-T5 (9/16")	ALUM
7	FIXED PANEL RETAINING CLIP 6063-T6	ALUM
8	FRAME HEAD 6063-T6	ALUM
9	FRAME SILL 6063-T6	ALUM
10	FRAME JAMB 6063-T6	ALUM
11	OXO ADAPTOR 6005-T5	ALUM
12	REINFORCEMENT 6005-T5	ALUM
13	OXO ADAPTOR REINFORCEMENT 6005-T5	ALUM
14	FIXED PANEL STILE 6063-T6 (9/16")	ALUM
15	XX ADAPTOR 6005-T5	ALUM
16	XX ADAPTOR REINFORCEMENT 6005-T5	ALUM
17	FRAME HEAD POCKET COVER 6063-T6	ALUM
18	FRAME SILL POCKET COVER 6063-T6	ALUM
25	WEATHERSEAL SEALANT (WS001) DOW 795	SILICONE
27	GLAZING SPACER	ALUM
28	GASKET, EPDM CLOSED CELL FOAM (9/16" GLAZING) (TREMCO)	EPDM
29	GASKET, EPDM CLOSED CELL FOAM (1-5/16" GLAZING) (TREMCO)	EPDM
30	WEDGE 70±5 EPDM (9/16" & 1-5/16" GLAZING) (TREMCO)	EPDM
31	BACKER ROD - CLOSED CELL EXTRUDED FOAM	POLYETHYLENE
34	SHIM	-
35	SETTING/ EDGE BLOCK	SILICONE
41	ROLLER ASSM.	STL. STEEL
42	REACTION CLIP 6005-T5	ALUM
43	TOE ANCHOR 6005-T5	ALUM
49	BOTTOM RAIL - FIXED PANEL 6063-T6 (1-5/16")	ALUM
51	I.G. GLAZING BEAD 6063-T6 (1-5/16")	ALUM
52	I.G. FIXED PANEL STILE 6063-T6 (1-5/16")	ALUM
53	I.G. INTERLOCK STILE - MOVING PANEL 6063-T6 (1-5/16")	ALUM
54	I.G. TOP RAIL 6063-T6 (1-5/16")	ALUM
55	I.G. LEAD STILE 6063-T6 (1-5/16")	ALUM
56	I.G. BOTTOM RAIL - MOVING PANEL 6063-T6 (1-5/16")	ALUM
57	INTERLOCK STILE - FIXED PANEL (1-5/16")	ALUM
58	BOTTOM RAIL - FIXED PANEL 6063-T6 (9/16")	ALUM
59	CAULK STOP, EPDM CLOSED CELL FOAM (9/16" & 1-5/16" GLAZING) (TREMCO)	EPDM
60	STRUCTURAL SILICONE DOW 995	SILICONE
61	WEDGE 70±5 EPDM (9/16" & 1-5/16" GLAZING) (TREMCO)	EPDM



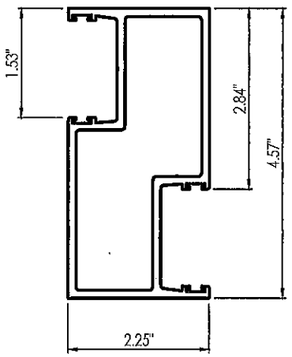
8 FRAME HEAD



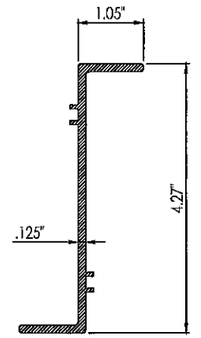
9 FRAME SILL



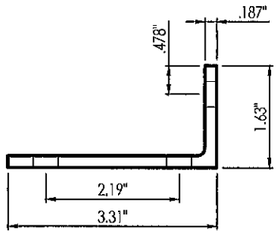
10 FRAME JAMB



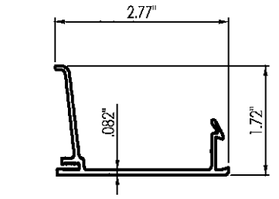
11 OXO ADAPTOR



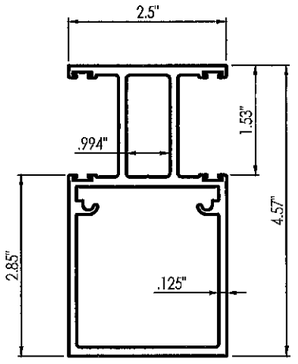
13 OXO REINFORCEMENT



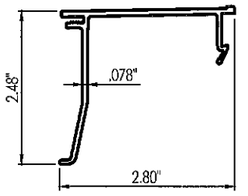
43 TOE ANCHOR



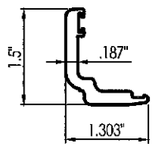
17 FRAME HEAD POCKET COVER



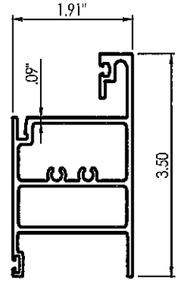
15 XX ADAPTOR



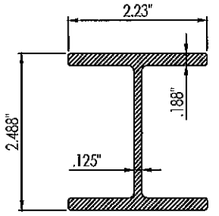
18 FRAME SILL POCKET COVER



42 REACTION CLIP



58 BOTTOM RAIL - FIXED PANEL
9/16" GLASS



16 XX ADAPTOR REINFORCEMENT

GORDON D. THOMAS
LICENSE
No. 46718
STATE OF FLORIDA
PROFESSIONAL ENGINEER
9/11/19
FL 46718

5008 TAMPA WEST BLVD.
TAMPA, FLORIDA 33634
PHONE: (813) 889-0718
FAX: (813) 886-0666

SUN METALS

PRODUCT: SLIDING GLASS DOOR

PART OR ASSEMBLY: BILL OF MATERIALS & COMPONENTS

NO	DATE	DESCRIPTION	BY
4	7/14/25	UPDATE TO 8TH ED. (2023)	FBC	ECV
3	9/21/20	UPDATE TO 7TH ED. (2020)	FBC	JCB
2	8/9/19	UPDATE TO 6TH ED. (2017)	FBC	ECV
1	2/18/15	UPDATE TO 5TH ED. (2014)	FBC	LFS

REVISIONS

DATE: 08/09/19
SCALE: NTS
DWG. BY: CO
CHK BY: ECV
DRAWING NO.: FL-15903.10
SHEET: 12 OF 12